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To: Power Management Controls PAC members
From: Bruce Nordman, LBNL
re: Project Questions

January 22, 2002

To prepare for the next PAC meeting for the Power Management Controls project, I would like to catch up with each PAC member by phone in the near future to go over the following questions, plus any questions or comments that you have for me.

Tentative Recommendations: The comments that we have received about the Tentative Recommendations on the “hard interface” have been overwhelmingly positive, but we are not satisfied that we have heard from a broad enough range of people and organizations yet. We would like to ask for PAC approval of the Tentative Recommendations at the next teleconference

- Have you been able to get comment on the Tentative Recommendations from others in your organization?
 - What feedback have you gotten?
 - Is there any further action needed on your part or LBNL’s before the PAC should be asked to endorse the tentative recommendations as the first part of the voluntary standards?
- Are there product designers in your company that we could interview by phone to discuss UI choices they make about power controls?

Decision-making and Change: Implementing these first recommendations will require outreach to people that have the authority to make the decision to adopt them, and identify any existing practices or standards within organizations that need to be changed.

- Have you located any relevant usability studies, corporate design standards, manual writing style guides, or other information that could be shared with us?
- What would be required for your organization to design new products according to the standards? Does this require some formal process or endorsement? Are there relationships with other companies (e.g. OEM or co-marketing) that offer constraints or opportunities for standardizing the power controls?

Standards: An outstanding issue for the project is how best to formalize the project results—at what institutional “home” to deposit the voluntary standards. In certain cases such as graphical symbols, there are existing international standards that conflict with our recommendations, so that amending them is a necessary goal. For the rest, we could:

- A. work towards adoption of the project results as one or more international standards,
- B. make adoption by some U.S. national organization (e.g. IEEE) the primary goal, or
- C. deposit the project findings with an organization outside the traditional standards apparatus (as has been done with many recent computer-related standards).

Option A provides instant credibility and visibility, and assurance of ongoing maintenance of the standard. On the other hand, accomplishing option A would likely take several years to complete, updating the content would be cumbersome, and could lead some countries to want to make the standards mandatory, contrary to our project goals. Additionally, traditional standards are sold rather than being freely available on the Internet, which creates a significant barrier to easy and wide distribution of the content.

- From the perspective of your organization, which of these are viable? Which are preferable?
- Are there any other (standards) organizations that you think should be specifically explored for this purpose?

Testing: An important part of the project is to subject the results to real-world testing to assure that what seems to make sense to us works for a wider variety of people.

- What aspects of the tentative recommendations do you think are most in need of testing? Are there some for which testing is not needed? What types of testing do you think are most appropriate?
- Does your organization have usability and/or testing resources that might be able to be tapped for this project?

Thanks, and I look forward to talking to you soon.

In the minutes from the PAC meeting (08/01) we asked:

While the first phase of the project has mostly focused on data collection, we now would like to engage in more discussion with manufacturers, specifically designers who are making these user interface decisions for current and future products. From the PAC, we would like the following:

- Contact info for user interface / human factors designers in your organization.
- Contact info for “usability labs” or comparable sites in your organization (for help in designing and possibly conducting testing).
- Any corporate design guidelines that address power controls and indicators.
- Any usability studies about power / power management.

For the latter two items, while we prefer to be able to cite and reference all data sources, we understand that some guidelines and studies can be provided only on background.